



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,011	03/10/2004	Keijiro Take	249315US-6 DIV	2660
22850	7590	01/30/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PHAN, TRI H	
			ART UNIT	PAPER NUMBER

2661

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/796,011	Applicant(s) TAKE, KEIJIRO	
	Examiner Tri H. Phan	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 7-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/156,703
(US6,477,158).
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/27/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment/Arguments

1. This Office Action is in response to the Response/Amendment filed on September 23rd, 2005. Claims 1-6 are now canceled and new claims 7-18 are added. Claims 7-18 are now pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nakamura et al.** (U.S.5,740,168; hereinafter refer as 'Nakamura') in view of **Hamalainen et al.** (U.S.6,148,209; hereinafter refer as 'Hamalainen').

- In regard to claims 7 and 9, Nakamura discloses, *a radio communication method of a base station controlling apparatus (figure 2A, element 17, col. 5, lines 46-48) used for a radio communication system including a plurality of base stations and a plurality of mobile stations, employing CDMA 'Code Division Multiple Access' for radio access and providing multi-rate transmission, the radio communication method comprising: step of transmitting code*

Art Unit: 2661

information by message to one of the plurality of base stations, said code information for switching a first code being used to a second code (see S7 in figure 4; col. 6, lines 36-38 wherein, it is obvious that the 'being used spreading code is the "first code" and the new spreading code is the "second code"), so as to enable the one of the plurality of base stations to transmit timing information (switching timing) by message and to switch the first code to the second code based on the code information transmitted, the switching at the one of the plurality of base stations conducted in synchronization with the switching of the first code to the second code at the one of the plurality of mobile stations, the one of the plurality of mobile stations switching the first code to the second code based on the timing information transmitted by the one of the plurality of base stations (see S17 and S25 in figure 4; col. 6, line 50 through col. 7, line 12), and wherein the timing information including an integer representing a frame at which the first code is switched to the second code (where the unique words in each frame is used for setting up the switching timing in prescribed frames as disclosed in N frames and M frames in figure 6; col. 8, line 64 through col. 9, line 12; or using frame number as disclosed in figure 16; col. 14, lines 7-17, or using flag in each frame for period of time in boundary of frames as disclosed in figures 8-15; col. 11, lines 50-59; and where the number or sequence of frames are integer).

Nakamura does disclose about *receiving a completion message to indicate completion of the step of switching at one of the plurality of mobile stations* as disclosed in col. 7, lines 13-16; but Nakamura lacks what Hamalainen discloses *wherein the completion message is transmitted from the one of the plurality of mobile stations to the base station controlling apparatus* (see 'assignment complete' in figure 6; 'handover com/assignment com' in figure 7; col. 7, lines 23-

Art Unit: 2661

26; and col. 8, lines 14-26. See also col. 5, lines 46-48 where Nakamura teaches the base station system BSS comprises the base station controller BSC and base stations BTS and the tasks of the BSC).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to send a complete message from the mobile station to the base station and the base station controller as taught by Hamalainen in the system of Nakamura in order to notify the base station controller that the assigned task has been completed.

- Regarding claim 8, in addition to features in base claim 7 (see rationales pertaining the rejection of base claim 1 discussed above), Nakamura further discloses about *releasing the first code* (for example see col. 2, lines 9-11 where the first code is released when the switching is completed).

- In regard to claims 10 and 12, Nakamura discloses, *a radio communication method of a base station controlling apparatus* (figure 2A, element 17, col. 5, lines 46-48) used for a radio communication system including a plurality of base stations and a plurality of mobile stations, employing CDMA 'Code Division Multiple Access' for radio access and providing multi-rate transmission, the radio communication method comprising: step of transmitting code information by message to one of the plurality of base stations, said code information for switching a first code being used to a second code (see S7 in figure 4; col. 6, lines 36-38 wherein, it is obvious that the 'being used spreading code is the "*first code*" and the new spreading code is the "*second code*"'), so as to enable the one of the plurality of base stations to transmit timing information

Art Unit: 2661

(switching timing) *by message and to switch the first code to the second code based on the code information transmitted, the switching at the one of the plurality of base stations conducted in synchronization with the switching of the first code to the second code at the one of the plurality of mobile stations, the one of the plurality of mobile stations switching the first code to the second code based on the timing information transmitted by the one of the plurality of base stations* (see S17-S25 in figure 4; col. 6, line 50 through col. 7, line 12); *and wherein the timing information regarding timing of switching the first code to the second code* (where the unique words in each frame is used for setting up the switching timing in prescribed frames as disclosed in N frames and M frames in figure 6; col. 8, line 64 through col. 9, line 12; or using frame number as disclosed in figure 16; col. 14, lines 7-17, or using flag in each frame for period of time in boundary of frames as disclosed in figures 8-15; col. 11, lines 50-59; and where the number or sequence of frames are integer).

Nakamura does disclose about *receiving a completion message to indicate completion of the step of switching at the one of the plurality of mobile stations* as disclosed in col. 7, lines 13-16; but Nakamura lacks what Hamalainen discloses *wherein the completion message is transmitted from the one of the plurality of mobile stations to the base station controlling apparatus* (see 'assignment complete' in figure 6; 'handover com/assignment com' in figure 7; col. 7, lines 23-26; and col. 8, lines 14-26. See also col. 5, lines 46-48 where Nakamura teaches the base station system BSS comprises the base station controller BSC and base stations BTS and the tasks of the BSC).

Art Unit: 2661

- Regarding claim 11, in addition to features in base claim 10 (see rationales pertaining the rejection of base claim 1 discussed above), Nakamura further discloses about *releasing the first code* (for example see col. 2, lines 9-11; where the first code is released when the switching is completed).

- In regard to claims 13-15, claims 13-15 are apparatus claims that have substantially the same limitations as the respective method claims 7-9. Therefore, they are subject to the same rejection.

- In regard to claims 16-18, claims 16-18 are apparatus claims that have substantially the same limitations as the respective method claims 10-12. Therefore, they are subject to the same rejection.

Response to Amendment/Arguments

4. Applicant's arguments filed on September 23rd, 2005 with respect to claims 7, 10, 13, and 16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The examiner can normally be reached on M-F (8:00-4:30).

Art Unit: 2661

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on (571) 272-3126.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tri H. Phan
January 23, 2006



BRIAN NGUYEN
PRIMARY EXAMINER